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MOSQUITO REPORT

MT. ADAMS DISTRICT

COLUMBIA NATIONAL FOREST

1 9 3 7





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COLUMBIA NATIONAL FOREST

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Submitted December 14, 1937.

K. P. CECIL, Forest Supervisor

By E. F. O. Little  
Acting



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## SEASONAL ABUNDANCE

Previous to the summer of 1934 the mosquito pest in the Mt. Adams District was so abundant that ordinary work and recreation during spring and early summer months, was almost prohibited. The season was fairly long and usually extended from the melting of snow until late in August. In ten minutes sample collections, as many as a hundred female mosquitoes could be taken on one's person.

In 1934 as a result of an unusually early spring and active control operations, the pest was practically gone by June 25. In 1935 heavy snows prevented the control forces from arriving at the area until June 17. At this time many adults were already on the wing. In spite of the late start, fair control was established and after August 15, the majority of the pest was gone.

Due to a great deal of permanent control work in 1935, expenses in 1936 were cut to approximately \$500.00 and the numbers of the pest were less than in any former year. Oiling operations were started June 11 and discontinued June 24.

## CONTROL MEASURES 1937

Control during the past season, no doubt largely due to the permanent control measures of 1935, was very effective. In fact, the drainage ditches constructed in 1935 worked so well that little oiling was necessary. Because of the lateness of the season, oiling operations were not started until June 4. This work was seriously handicapped by heavy rains and was discontinued on July 13 due to pressure of other activities. The pest was reported at South Camp as late as August 15. No permanent control work was done here during the present year.

## AREAS TREATED, 1937

### Twin Buttes

The exact amount of oil used in the various individual areas was not recorded for the present year but it is safe to assume that approximately 630 gallons were used in this area.

### Bird Creek Meadows

No control work was done in the Bird Creek meadow area this year. Hundreds of people are finding enjoyment in this mountain retreat. Boy scout and girl scout camps have been established here and are growing each year. Fishermen, hikers and others may be found throughout the summer enjoying the south slope of Mt. Adams. However, because of the many meadows and potholes found in this area, myriads of mosquitoes persist during the summer months and cause most of the vacationists unmitigated annoyance.



AREAS TREATED, 1937 (Cont'd.)

BIRD CREEK MEADOWS (Cont'd.)

The several meadows and breeding areas in this area could be controlled at moderate cost if permanent control measures, such as suggested in our 1936 report, could be effected.

EXPENDITURES 1934 to 1937

YEAR	OIL		LABOR		OVERHEAD	TOTAL
	No. Gals.	Cost of Oil	No. Days	Cost.		
1934	860	77.40	155	360.15	498.35	935.80
1935*	986	88.74	47	450.00	277.66	816.00
1936	650	58.50	13	130.00	83.33	271.83
1937	<u>629</u>	<u>62.90</u>	<u>29</u>	<u>217.50</u>	<u>200.00</u>	<u>480.40</u>
Total	3125	287.54	244	1157.65	1059.34	2504.03

\*Permanent-control measures 1935 cost \$1302.80

Temporary control 1934-1937- - - - 2504.03

Total sum for mosquito control 1934-1937-\$3806.83

These costs are approximate due to estimates being made on such items as transportation, supplies, and hauling of men, etc.



## ADVANTAGES OF PERMANENT CONTROL MEASURES

Temporary control measures if carried on year after year, is an expensive and uneconomical method of reducing the numbers of mosquitoes. For example: had it been possible to install permanent control methods better results would have been obtained for the average annual expenditure \$500.00 both in past and in future years.

Permanent control measures have been discussed in former reports. Such measures deal largely with manipulations of water levels by ditching with plow and dynamite and building of small dams by means of bull dozers.

## BEAVER PLANTINGS AND MOSQUITO CONTROL

An experiment is being made this year in maintaining water levels by means of introduced beaver plantings. Six beavers were planted in Large Steamboat Lake in October 1937, where a large mosquito breeding ground surrounds the margin of the lake. It is hoped the beaver will dam the outlet of the lake. The construction of such a dam by man power has been impossible in the past because of the shortage of funds. The results of this experiment will not be evident until the summer of 1938 or 39.

It is possible that additional plantings of beaver in Lone Butte and Skookum Meadows may also do a great deal toward maintaining a relatively high water level.

## SUMMARY AND RECOMMENDATIONS

1. Permanent control measures should be started in early spring.
2. Temporary control measures should be gradually stopped, due to the expense as compared with the actual amount of control accomplished.
3. Beaver should be stocked in all suitable areas where water levels can be raised. In this manner mosquito breeding grounds will be kept flooded to prevent mosquito breeding. This is particularly recommended for Meadow Lake. In late summer a tractor with bulldozer and plow should be assigned for permanent control work for approximately two weeks.
4. It is suggested that better work could be accomplished by using less dynamite and more ditching with a team and machinery.







